

This protocol report is based on a feedback session held between the course examiner, course responsible and two students from the course.

The course evaluation consisted of one meeting that took place (2020-05-01) after the written exam was held. The original planned meeting for the course feedback lunch was to be on March 17 2020 in person at KTH. However due to social distancing recommendations because of covid-19, it was decided pertinent to cancel this original meeting. The meeting was then scheduled for the later date. The students/members of the evaluation committee were asked to give their comments on the general impression of the course, the course material, lecture and TA sessions, and the examination. The students were also asked if they had any additional feedback or recommendations on how the course could be improved in the future. During the meeting the students gave valuable feedback and comments that were discussed with the examiner and the course responsible. The summary of the meeting was broken down into the following areas:

General Impression:

- One of the students remarked that the course was very interesting and something they could see themselves working with in the future.
- The other student agreed that they found the course material to be very interesting and remarked that they had learned a lot.
- Both students agreed that the course was quite difficult and also a lot of work. One student remarked that it was the most work they had experienced out of any course. The other student pointed out that the level of work would make it difficult to take other large courses simultaneously.
- They both felt that the projects were very time consuming and a lot of time was spent on de-bugging the code. As a result, they did not have a lot of time to dedicate to learning the theory. One student pointed out that because there wasn't enough time to study the theoretical portion throughout the course, they learned a lot of it before the final.
- Both students suggested offering the course over two periods instead of one, to give more time for students to work on the projects. Another student pointed out that the course could be offered for more credits. One of the students clarified that if some of the changes that were discussed during the feedback session such as a restructuring of the TA sessions, improving the code, more examples in lecture and having a TA session for examples with each topic than the course could remain during one period. The suggestion for having the course over 2 periods is based on the course as it was structured currently.
- The students found that due to the fast nature of the course, it was difficult because the next lectures would start before they had time to complete the assignments associated with the previous lectures.
- This year the assignments were only based on the numerical portion of the reports and at the end of the course there was a written exam. One student believed that having some sort of theoretical portion for the reports would be better. Because then they would focus more on the theory throughout the course.
- Both students thought it was difficult to receive someone else's code and then
 to fill it in. One said it could be improved by having more consistent variables
 names as well as better commenting of the code.
- Some of the questions that did involve the theory, the students found they spent quite a bit of time answering. These questions could have been more clearly stated, so the students knew what information they needed to provide.

- The students thought that the TA sessions could have been better distributed throughout the course. It was difficult to complete the assignments when the TA sessions were available. Not "more" TA sessions but rather better distribution of TA sessions. It would also be more helpful if there were TA sessions right before the deadline.
- One of the students pointed out it could be helpful to have smaller examples throughout the unit in the lecture as opposed to one large example at the end.
- One student commented that there were some inconsistencies when it came to the TA grading and referenced MATLAB screenshots. Which some TA's accepted and another did not.
- One student said it was by far the most time consuming course they had ever taken. The other student said it was the only other 7.5 credit course they had taken. They found the amount of time comparable to other friends who were taking 7.5 credit courses.
- One student said they spent around 30 hours a week including lectures and TA sessions. The other student said they spent around 20 hours a week, but perhaps more for the weeks leading up to the assignment due dates.

Examination:

- One of the students believed there should be a written exam. It forced them to study for the written exam and they learned a lot through studying for it.
- Both students thought for the exam questions, sometimes it was not clear what information they should provide. So, it would have been helpful to have subsections or to ask for more specific things. This could have been because this was the first exam, so it might not have been as large of an issue, if they had a previous exam to study from.

Lectures and TA sessions:

- One of the students thought the lectures were very good and so were the lecture notes. The lecture notes were better they felt than the course book. They thought the TA sessions were really good. Sometimes in the TA sessions there was a mismatch. The students wanted to be able to solve the problems, but the TAs wanted the students to understand the theory. They thought the help they received was good.
- The other student thought the tutorial sessions were very good because they got help and it was nice the TA's seemed like they cared to help. The lectures were very clearly explained and the guest lectures were very good, particularly the one given by Robert from SVK. The slides were very helpful and sometimes had things that were not fully explained in the book.
- The students thought that the last supplementary TA session given before the exam was very helpful. It helped them with knowing how to study.
- The students commented that one structured TA session per project where the TAs go over problems and solutions would be very helpful.
- The last assignments D3, D4 were graded and given back on the last day of the TA sessions and some of the students still had questions on those assignments. Some students emailed the TAs and got the response that the question should have been asked during the TA session. However, one student pointed out that if the question was answered incorrectly then most likely the student did not understand while the TA sessions were still being held.

- One of the students pointed out that it would have been good to have some sort of help available during the two week break between the last supplementary TA session and the exam.
- One student offered that small examples more continuously throughout the lectures would be helpful as opposed to one large example at the end.

Course Material and Literature:

- One student commented that there are some questions in the compendium, where those questions are not answered. They found that to be confusing. Then, when the next TA session would come up the priority was on solving the project. They said if a hint for these questions had been provided it would have been helpful.
- The students said they didn't reference the exercise book very much until before the exam. Sometimes, the exercise book was used as a reference to solve the projects if there were similar problems that could be referenced.
- One student used the exercise book as a tool to study for the exam.
- One student pointed out that for the exercise book, the solutions would say –
 to see textbook and not reference the specific page. If the page number had
 been given, that would have saved time.

Conclusion:

Overall, the students found the course to be interesting. The students generally seemed to find the course to be very time consuming, and that a lot of time was spent on the projects and specifically on debugging code. As a result, there was not a lot of time left for studying the theoretical portion of the report. The students recommended that it would be better if the course was offered over two periods, and one student suggested offering more credits for the course. Both students thought the TA sessions and lecture sessions were good and believed it would be beneficial if there was one structured TA session per project where the TA could solve exercises. Also, questions on the exams and projects could have been more clearly stated so it was clear to the students what information they were expected to provide.